

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-18 (Cancelled)

19. (Currently Amended) Apparatus for remotely monitoring and controlling water parameters in a water pool or spa bathing installation including a recirculating water flow path, comprising:

a plurality of sensors for monitoring of a plurality of water bathing installation parameters;

an on board electronic pool/spa control system operatively connected to a bathing installation water pump for circulating water through the recirculating water flow path and a water heater, said control system ~~an electronic data acquisition and control device~~ in electrical communication with said sensors for receiving data signals indicative of the monitored water installation parameters, said ~~electronic data acquisition and control device~~ control system configured to detect an error condition in at least one water installation parameter range and generate an error alert when said parameter is outside said range, said ~~electronic data acquisition and control device~~ further configured to selectively generate control signals to one or more water bathing installation control devices including said pump and said heater to affect a change in said water bathing installation parameters;

a remote web server; ~~and~~

a dedicated network interface circuit;

a data communication link between said on board electronic pool/spa control system and said dedicated network interface circuit for carrying data signals and command signals; and

wherein said [[a]] dedicated network interface circuit for providing is adapted to provide a web-based network internet connection between to said remote web server and said data acquisition and control device said interface including means for periodically transmitting said data signals to said remote web server at a selectable interval for collection, and said storage and processing on said remote web server, and for transmitting commands received from said remote web server to said data acquisition and control device on board electronic pool/spa control system for controlling said water installation parameters related to one or more water bathing installation control devices.

20. (Currently Amended) The apparatus of Claim 19, further comprising means connected by an internet connection to the remote web server for remotely viewing a current operational state of the ~~water~~ bathing installation.

21. (Currently Amended) The apparatus of Claim 19, further comprising means connected by an internet connection to the remote web server for remotely viewing the data stored on the remote server in the form of a graph, chart, or table.

Claims 22-29 (Cancelled)

30. (Currently Amended) A method for remotely monitoring and controlling ~~water parameters of a pool or spa~~ bathing installation including a recirculation water flow path and an on board electronic pool/spa control system, said method comprising:

~~periodically~~ collecting ~~water~~ bathing installation status and parameter data ~~from regarding the pool or spa~~ bathing installation at the on board electronic pool/spa control system;

providing a data communication link between the equipment on board electronic pool/spa control system and ~~a remote server on a predetermined schedule or upon demand~~ a dedicated network interface circuit adapted to provide an internet connection;

transmitting the ~~water parameter~~ bathing installation status and parameter data over said data communication link and over said internet connection from said equipment to the a remote web server for storage and processing at the remote web server;

accessing the remote web server by a remote device connected to the internet to access the ~~water parameter~~ bathing installation status and parameter data; and

transmitting control commands from the remote web server to the ~~pool or spa~~ on board electronic pool/spa control system through the internet, the dedicated network interface circuit and the data communication link to direct the on board pool/spa electronic control system to affect a change in said parameters bathing installation status;

~~wherein the steps of transmitting and accessing are facilitated by the Internet.~~

31. (Currently Amended) The method of Claim 30, further including accessing the remote web server by use of an Internet browser.

32. (Original) The method of Claim 30, further comprising remotely accessing the remote server to view a current operational state of water installation.

33. (Original) The method of Claim 30, further comprising remotely viewing the data stored on the remote server in the form of a graph, chart, or table.

Claims 34-38 (Cancelled)

39. (Currently amended) A method of monitoring and controlling pool water parameters over the Internet, including:

~~providing means to monitor~~ monitoring said water parameters at said pool ~~by a web-enabled on board electronic pool control system~~, and ~~detect~~ detecting an error condition in at least one water parameter range;

transmitting said parameters to a web server connected to the Internet at a selectable interval;

storing said parameters on said web server;

making a connection request to the web server from a browser running on a remote device connected to the internet, and authenticating the connection request by entry of a uniquely assigned password for the pool;

viewing said parameter information stored on said web server on the remote device;

transmitting a command from the remote device to said web server in response to said viewing;

transmitting a command from said web server to ~~equipment~~ said web-enabled on board electronic pool control system at said pool to cause ~~said one or more items of pool~~ equipment to take a desired action affecting said water parameter; and

generating from said ~~providing means~~ web server or said web-enabled on board electronic pool control system or both said web server and said web-enabled on board electronic pool control system an error alert when said water parameter is outside said range.

40. (Currently Amended) A method for remotely monitoring and controlling water parameters in a water bathing installation including a recirculating water flow path, a pump for pumping water through the water flow path and a heater for heating water, comprising:

providing a sensor for monitoring a water installation parameter;

providing ~~an electronic data acquisition and control device~~ an on board electronic bathing installation control system in communication with said sensor for receiving data signals indicative of the monitored water parameter, said ~~electronic data acquisition and control device~~ control system configured to detect an error condition in at least one water parameter range and generate an error alert when ~~said parameter is outside said range, said electronic data acquisition and control device further~~ configured to selectively generate control signals to control a device related to said parameter;

providing a remote web server;

providing a remote control device; and

providing a dedicated network interface circuit for providing an internet connection between said remote web server and said ~~data acquisition and control device~~ electronic bathing installation control system ~~via a web-based network~~;

wherein implementation of the method comprises the steps:

i) transmitting data related to said water parameter from said electronic bathing installation control system through said dedicated network interface circuit to said remote web server for collection and storage;

ii) making a connection request to the web server from a browser running on said remote device connected to the internet, and authenticating the connection request by entry of a uniquely assigned password for the bathing installation, and viewing said data related to said water parameters by said remote control device;

iii) transmitting a command from said remote control device to said remote web server in response to said viewing;

(iv) transmitting said command from said remote server to said ~~data acquisition and control device~~ electronic bathing installation control system for controlling said ~~device~~ electronic bathing installation control system to affect a change in said parameter.

41. (Previously presented) The method of Claim 40, wherein a web browser is used for said viewing of said data related to said water parameter.

42. (Previously presented) The method of claim 41, further including updating said data related to said water parameter in real-time using a Java applet.

43. (Currently Amended) The method of Claim 40 including providing a spa as said ~~water~~ bathing installation.

44. (Currently Amended) The method of Claim 41 including providing a pool as said ~~water~~ bathing installation.

45. (Cancelled)

46. (Cancelled)

47. (Cancelled)

48. (New) A method of monitoring and controlling a spa or pool system remotely, comprising:

establishing a data link between a home computer network and an electronic controller of the spa or pool system;

establishing an internet connection between a remote web server and the electronic controller through the home network;

transferring data indicative of operational and diagnostic information of the spa or pool system from the electronic controller via the internet connection to the remote web server for storage and processing;

establishing an internet connection between the remote web server and a remote computer station or web enabled remote control device;

logging into the remote web server using the remote computer station;

viewing said uploaded data using a graphical user interface on a display device at the remote computer site or web enabled remote control device by a spa user, spa owner or spa service personnel, said uploaded data including data representative of real time and historical operational data regarding the monitored spa or pool system; and

transmitting commands from said remote computer station or the web enabled remote control device through said remote web server and said home computer network to said electronic controller to cause the electronic controller to control one or more spa or pool devices or a water parameter of the spa or pool.

49. (New) The method of Claim 48, wherein said establishing a data link between a home computer network and an electronic controller of the spa or pool system comprises establishing a wireless data link between said home computer network and said electronic controller.

50. (New) The method of Claim 48, wherein said transferring data indicative of operational and diagnostic information of the spa or pool system comprises:

transferring data indicative of a spa cover alarm notification.

51. (New) The method of Claim 48, wherein said transferring data indicative of operational and diagnostic information of the spa or pool system comprises:
transferring data indicative of a pool gate alarm notification.

52. (New) The method of Claim 48, wherein said transferring data indicative of operational and diagnostic information of the spa or pool system comprises:
transferring data indicative of a GFCI trip or power down notification.

53. (New) The apparatus of Claim 19, wherein said on board electronic pool/spa control system is fabricated on a circuit board, and said dedicated network interface circuit is mounted on said circuit board.